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**United States Patent** [19]**Baker**[11] **Patent Number:** **5,815,735**[45] **Date of Patent:** **Sep. 29, 1998**

[54] **PORTABLE COMPUTER WITH  
REMOVABLE DISPLAY SCREEN USING  
REMOVABLY MATEABLE CONNECTORS  
TO FORM THE SOLE SUPPORTING  
INTERCONNECTION BETWEEN THE  
COMPUTER BASE PORTION AND DISPLAY  
SCREEN STRUCTURE**

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[51] **Int. Cl.<sup>6</sup>** ..... **G06F 13/00**

[52] **U.S. Cl.** ..... **395/892**; 439/31; 439/137;  
439/341; 361/681

[58] **Field of Search** ..... 359/713; 364/708.1;  
345/87, 680; 361/681, 680, 686; 395/281,  
509, 892; 439/31, 137, 341

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[57] **ABSTRACT**

An LCD display unit is provided with enhanced brightness and a widened viewing cone angle and is removably connected to the base portion of a notebook computer via an LVDS connector. The notebook computer is used as a portion of a desktop computing system that further includes a docking station and a specially designed pivot arm type display support structure. To incorporate the notebook computer into the desktop system, the LCD display unit is removed from its associated base portion, and the removed LCD display unit is plugged into a complementary LVDS connector portion on the support structure which is connected via LVDS cabling to an appropriate interface portion linked to the inserted notebook computer base portion in the docking station. In this manner, the brightness and viewing angle enhanced LCD display conveniently takes the place of the usual larger CRT display unit typically utilized in a desktop computing system, thereby reducing both the cost of the system and the overall desk space required therefor.

**31 Claims, 3 Drawing Sheets**

